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ABSTRACT

The Dissemination Efforts Supporting School Improvement (DESSI) study examined the adoption or development and implementation in 146 schools in 10 states of 61 practices that were part of 4 federal or state programs. Local schools in the study sample were asked to identify those individuals (facilitators) who had helped them with a particular new practice. Based on data collected from 96 external and 78 local facilitators, this paper describes the distribution of facilitators by program and by site; looks at the general patterns of facilitator assistance; examines the activities included and emphasized in the assistance given by facilitators; and discusses the variation in certain outcome variables when different assistance configurations are present. Findings show that the sheer presence of facilitators in local sites attempting change is striking: of 146 local schools in the study sample, only 17 did not nominate either an external or a local facilitator. Assistance given by facilitators formed nine clusters of activity: (1) initiation/awareness, (2) support of teachers, (3) administrator adoption preparation, (4) teacher adoption preparation, (5) materials, (6) implementation specifics, (7) evaluation, (8) continuation/diffusion, and (9) allocating financial resources. Accompanying the text are 14 data tables. (MLF)

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INSIDE-OUT AND OUTSIDE-IN: CONFIGURATIONS OF ASSISTANCE AND THEIR IMPACT ON SCHOOL IMPROVEMENT EFFORTS

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A Study of Dissemination Efforts Supporting School Improvement

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INSIDE-OUT AND OUTSIDE-IN: CONFIGURATIONS OF ASSISTANCE AND THEIR IMPACT ON SCHOOL IMPROVEMENT EFFORTS

Pat L. Cox

In the Study of Dissemination Efforts Supporting School Improvement (DESSI), we gave a great deal of attention to the individuals -- both inside and outside local districts -- who assisted schools to improve practice. Our selection criteria were based on the definition of an assistance provider as someone (1) whose actions are directed at improvement of individual or institutional performance, (2) who uses knowledge or knowledge-based products and services as key instruments of improvement, and (3) who occupies a position which spans institutional boundaries, linking knowledge resources developed in one setting with needs and opportunities which occur in another.

The DESSI study examined the adoption or development and implementation of 61 practices in 146 schools in 10 states. The practices we studied were part of four federal or state programs: the National Diffusion Network, including Title I; state-administered dissemination programs, largely Title IV-C adoption projects; Title IV-C locally developed projects; and the Bureau of Education for the Handicapped Marketing Program. Assisters and facilitators were interviewed along with teachers, principals, and superintendents to learn about the factors affecting school improvement efforts.1

1. Who are the External and Local Facilitators?

Local schools in the study sample were asked to identify those individuals who had helped them in the process of adoption, development, and/or implementation of a particular new practice. We categorized the respondents nominated in this manner into two types based on their location vis-a-vis the nominating school districts. "External" facilitators were individuals from outside the nominating school district who had given assistance; "local" facilitators were district personnel within the nominating school system but outside the school building, who were identified as having assisted school building staff with a particular new practice. We interviewed 96 external facilitators, including 80 who had worked with 97 schools (66% of the total sites in the sample). In addition, 78 local facilitators, who assisted 66 schools (45% of the total), were interviewed.

Because our identification process was based on nomination rather than sampling from a known population of facilitators, the respondents we interviewed were a much more diverse group than might otherwise have been the case. This diversity caused us to rethink some of our assumptions about the two types of facilitators. For example, at the start of the study we viewed the external facilitator role as the more formal, professional

one, and the local facilitator role as more informal and likely to be performed as part of other duties. This proved not to be the case. While a sizable proportion of the external respondents could be labeled as "pure" professional facilitators, many of them had other salient roles which seemed to fall well outside the boundaries of such a definition. In fact, a few worked as facilitators either in addition to their main work or as a by-product of such work, making them more like local facilitators in some ways.

This ambiguity affirms the wisdom of our decision to collect information on discrete assistance behaviors irrespective of nomination or formal role designation; in data analysis, we could then allow the computer to cluster the range of facilitating behaviors without regard to their configuration in pre-designated role holders. In other words, we often counted, compared, and contrasted behaviors rather than individual perceptions or job descriptions.

This paper is based on data collected from external and local facilitators regarding the particular assistance they gave to schools in the study sample.[2] Both a questionnaire and an interview protocol were used. Because local facilitators were also interviewed about their administrator role, only selected site-specific information was collected from these individuals, to alleviate respondent burden.

The analysis of assistance to local sites focused primarily on understanding the separate contributions of external facilitators and local facilitators; in the causal models we discuss in the final study report, these were examined as individual strands.[3] On analyzing these separate pools of data, we began to realize that the configuration of assistance to local sites might help to illuminate the impact of help from external and local facilitators.

By configurations of assistance, we mean the different combinations of external and local assistance to schools, including sites where both were present, sites where only external or only local facilitators were present, and sites where neither was present.

In this paper, I will describe the distribution of external and local facilitators by program and by sites; look at the general patterns of external facilitator assistance; examine the activities included and emphasized in the assistance given by external and local facilitators; and discuss the variation in certain outcome variables when different assistance configurations are present.

The Distribution of External and Local Facilitators by Program

Most of the external facilitators in our sample had funded assistance roles within two federally-sponsored dissemination programs: these were the State Facilitators (SFs) and Developer/ Demonstrators (D/Ds) of the National Diffusion Network (NDN) and included Title I D/Ds; and the program developers of state- administered programs. The sample also includes assistance-givers who became associated on an individual basis with ESEA Title IV-C locally developed projects (see Table 1).[4] Our sample did not include any external facilitators associated with the Bureau of Education for the Handicapped (BEH) Marketing Program; in fact, we had a great deal of trouble even locating schools that were using BEH products.

The 80 external facilitators worked with 97 local sites; many worked with more than one site, and in some instances, more than one external facilitator assisted a given site. Accordingly, we analyzed data concerning 131 cases of assistance or 1.6 cases per respondent and 1.4 cases per site.

Table 1 also shows the distribution of local facilitators by program. NDN Title I sites often had Title I coordinators or federal program coordinators who played this role. Title IV-C local development sites also had project directors at the district levels. These two programs had the only "formal" local facilitators. In NDN non-Title I sites, there still were a large number of local facilitators, while in sites using state-administered practices, there were relatively few. BEH sites had very few local facilitators; perhaps this was because of the nature of the practices, which were usually materials rather than whole programs.

At 66 of our local sites, at least 1 local facilitator was identified. (Ten of those sites had 2 local facilitators and 1 site had 3.) No one was identified in the remaining sites. Because they were nominated, the local facilitators in our sample were clearly different from the superintendent and principal respondents, who were automatically included in the study sample because of their formal administrative positions. Several superintendents and principals had little or no awareness of the practices being implemented in their schools -- these were labeled "non-implementing" administrators.

However, local facilitators were not simply filling in for the non-implementing administrators in insuring the implementation of a new practice at a site. In fact, local facilitators were identified more often at sites which had superintendents and principals who were active in the implementation process than at sites which had non-implementing superintendents and principals.

Table 1
Distribution of External Local Facilitators in the Sample by Program

Data Sources: Sample Lists

	All	NDN		Title IV-C Local Development	State-Administered	BEH
		Non-Title I	Title I			
1. Total number of sites for program	146	48	26	24	31	17
2. Number of cases of external assistance (N = 80)	131	63	32	12	24	0
3. Number of sites with external facilitators	97	44	24	8	21	0
4. Number of local facilitators	78	27	19	24	6	2
5. Number of sites with local facilitators	66	23	16	20	5	2

General Patterns of External Facilitator Assistance

Before discussing the configurations of assistance to local sites, it is important to explain in more detail the manner in which external facilitators were likely to work.

The NDN State Facilitators and Developer/Demonstrators perform different but complementary roles. State Facilitators tend to be generalists with regard to practices; Developer/Demonstrators are specialists with intimate knowledge of their innovations. Acting as a broker or arranger, each State Facilitator works with schools in a particular state, helping them to select among practices created by Developer/Demonstrators, who are themselves usually school-based practitioners. All practices available through the NDN have been validated in a federal review process as having demonstrable impact on student achievement or similar outcomes. One of the goals of the NDN is to facilitate dissemination of practices across state boundaries, so Developer/Demonstrators work with State Facilitators and schools across the country. This interstate focus seems to working: the external facilitators who worked with schools in the ten states of the study sample came from twenty different states.

Some of the states in the study operate dissemination programs that are similar to the NDN but restricted to the identification and diffusion of exemplary practices within state boundaries. Personnel in the state departments of education or intermediate service units may serve as brokers or facilitators for state program developers. Many states have their own validation process to assure quality control. Partly because some of these dissemination systems began rather recently, the full impact of state efforts was not evident in the study, which concentrated on practices implemented in schools prior to the end of calendar year 1978. Three intermediate service unit personnel who assisted Title I adoptions, and two intermediate service unit staff who helped with state-administered adoptions (i.e., performing NDN State Facilitator-like functions), are included in the sample of external facilitators and are listed in Table 1 with the programs they assisted.

The National Diffusion Network and many state-administered dissemination programs are precisely that -- diffusion and dissemination programs. Because their primary aims have been to spread exemplary practices, they have emphasized extensive over intensive services, adoption over implementation activities. While NDN State Facilitators help with arrangements for adoption, and Developer/Demonstrators from the NDN and developers from state programs provide training in the practice and some support, the fitting of the innovation in the host district is left largely to the locals. Considerable assistance is provided away from the actual implementation site, in group training sessions or, in the case of follow-up help, through telephone conversations. The fact that no other types of external facilitators were identified for the NDN and state-administered programs suggests the compactness

of these assistance strategies: schools are able to search for and obtain both practices and assistance in a coordinated sequence, obviating the search for assistance from a variety of different sources. The latter process is a self-contracting approach that can be rewarding, but it is both complicated and time-consuming.

The external facilitators for the Title IV-C locally developed projects were located by schools through the self-contracting method. The assisters varied greatly in the nature and scope of their help: some worked on a long-term basis with a site through the whole development and implementation process; others provided components of practices without much involvement in the site; still others worked intermittently through the planning/implementation process, contributing heavily at the evaluation phase. One site had called in ten different consultants to help with various aspects of the development/implementation process; others had done nearly everything themselves.

One should not assume, then, that external assistance means help rendered on the site, face-to-face, or continuously. Therefore, knowing the federal strategies we were studying, we expected that while many external agents worked with local district or school personnel to facilitate the implementation of a new practice, relatively few of them would have intimate knowledge of the innovation in place in the classroom. This proved to be the case. The question respondents answered was, "Are you familiar with (the practice) at (the school building)?" In 48 of the 131 cases of assistance, respondents said they were familiar with the practice at the site; in 83 of the cases, they reported they were not.

The picture of practice-related assistance becomes more complicated when responses to this question are sorted by program. Table 2 displays the distribution of the five major role groups on the question of familiarity with the practice at the site. The external facilitators most familiar with practices at the sites were those who had worked with Title IV-C locally developed projects. Next most familiar as a group were state-administered program developers, who, as we shall see, were most likely to have begun their work directly with the school building rather than the district; this suggests that they had the opportunity to be acquainted with the practice in its local setting. NDN external facilitators were least familiar with practices at the local sites.

Table 2
External Facilitator Familiarity with the Practice
at the Site by Program
Data Source: External Facilitator
Site-Specific Questionnaire

	Yes	No	
Title IV-C locally developed projects	9 (75%)	3 (25%)	= 12
State-administered programs	14 (58%)	10 (42%)	= 24
NDN Title I	10 (31%)	22 (69%)	= 32
NDN non-Title I (SFs)	4 (25%)	12 (75%)	= 16
NDN non Title I (D/Ds)	11 (23%)	36 (77%)	= 47
N of cases =	48 (37%)	83 (63%)	= 131 cases

If most of the external facilitators are not familiar with the practice at the site, then who is? This is where the local facilitator may play a major role.

2. External and Local Assistance to Local Sites

The list of assistance activities originally developed at the Belmont Conference on Linking Functions was used in site-specific interviews, to gather information about the activities of both external and local facilitators with regard to specific sites in the study sample. The following discussion is based on data from the activities list. Table 3 presents the distributions of the two facilitator samples for each item included in the activities list. Local facilitators were not asked to complete the section on initiation of relationships.

In comparing the remaining categories of items for which we have data from both groups, local facilitators score higher on every item with the exception of two: providing detailed information, and working with site contact (who, in many cases, is the local facilitator). These are the activities external facilitators spend the most time on, judging from their mean scores.

Local facilitators spent most time on other activities, including assessing needs, arranging training, and securing materials or other required resources. However, they too spent considerable time providing detailed information as well as building and maintaining support among school personnel.

Table 3
External Facilitator and Local Facilitator Assistance to Local School Sites
Data Source: External Agent and Local Site External Agent Site-Specific Interviews

ACTIVITY	Amount of Time Spent on Activity: A lot of time = 1		Moderate amount = 2		A little time = 3		Did not perform this activity = 4		TOTAL		Sample Mean	
	EF*	LF**	EF	LF	EF	LF	EF	LF	EF	LF	EF	LF
A. Initiating Relationships												
1. Arranging or participating in conferences	19 15.0%	+	49 38.6%	--	31 24.4%	--	28 22.0%	--	127 100%	--	2.54	--
2. Distributing general information (e.g., flyers, newsletters)	10 7.8%	--	32 24.8%	--	59 45.7%	--	28 21.7%	--	129 100%	--	2.81	--
3. Hosting visits to review materials	7 5.5%	--	28 21.9%	--	28 21.9%	--	65 50.8%	--	128 100%	--	3.18	--
4. Holding demonstration visits	14 10.9%	--	30 23.3%	--	20 15.5%	--	65 50.4%	--	129 100%	--	3.05	--
5. Contacting new clients by mail, telephone, or in person	12 9.5%	--	32 25.4%	--	46 36.5%	--	36 28.6%	--	126 100%	--	2.84	--
B. Assisting Clients in Deciding on new Resources												
6. Seeking commitment from school administrators	6 4.6%	10 14.9%	34 26.4%	32 47.8%	45 34.9%	16 23.9%	44 34.1%	9 13.4%	129 100%	67 100%	2.98	2.36
7. Seeking commitment from teachers	7 5.4%	18 26.5%	31 23.8%	26 38.2%	37 28.5%	14 20.6%	55 42.3%	10 14.7%	130 100%	68 100%	3.08	2.24
8. Seeking support from local school boards	1 .8%	9 13.4%	5 3.9%	12 17.9%	19 14.8%	23 34.3%	103 80.5%	23 34.3%	128 100%	67 100%	3.75	2.90
9. Preparing a "case" for the decision to adopt	2 1.5%	13 19.4%	20 15.4%	21 31.3%	27 20.8%	15 22.4%	81 62.3%	18 26.9%	130 100%	67 100%	3.44	2.57
10. Assessing needs	7 5.4%	29 43.3%	24 19.6%	19 28.4%	28 21.7%	13 19.4%	70 54.3%	6 9.0%	129 100%	67 100%	3.25	1.94
11. Building support among school personnel	8 6.2%	18 26.5%	18 14.0%	27 139.7%	36 27.9%	15 22.1%	67 51.9%	8 11.8%	129 100%	68 100%	3.26	2.19
12. Making library and computer searches for materials	0 0.0%	8 11.9%	5 4.0%	8 11.9%	11 8.7%	21 31.3%	110 87.3%	30 44.8%	126 100%	67 100%	3.83	3.09

*EF = External Facilitator **LF = Local Facilitator
‹Local facilitators were not asked to respond to items included in Initiating Relationships.

Table 3
External Facilitator and Local Facilitator Assistance to Local School Sites (Continued)
Data Source: External Agent and Local Site External Agent Site-Specific Interviews

ACTIVITY	Amount of Time Spent on Activity: A lot of time = 1		Moderate amount = 2		A little time = 3		Did not perform this activity = 4		TOTAL		Sample Mean	
	EF*	LF**	EF	LF	EF	LF	EF	LF	EF	LF	EF	LF
C. Assisting Clients in Preparing for Adoption												
13. Arranging training	19 15.0%	24 36.9%	48 37.8%	27 41.5%	41 32.3%	8 12.3%	19 15.0%	6 9.2%	127 100%	65 100%	2.47	1.94
14. Training the users	43 33.3%	21 33.3%	39 30.2%	18 28.6%	10 7.8%	11 17.5%	37 28.7%	13 20.6%	129 100%	63 100%	2.32	2.25
15. Providing detailed information	38 29.2%	21 32.3%	46 35.4%	19 29.2%	34 26.2%	18 27.7%	12 9.2%	7 10.8%	130 100%	65 100%	2.15	2.17
16. Securing materials or other required resources	21 16.2%	20 31.3%	32 24.6%	22 34.4%	46 35.4%	18 28.1%	31 23.8%	4 6.2%	130 100%	64 100%	2.67	2.09
17. Working with administrators	10 7.8%	12 18.7%	49 38.3%	28 43.8%	45 35.2%	19 29.7%	24 18.8%	5 7.8%	128 100%	64 100%	2.65	2.27
18. Working with site contact	32 24.8%	9 14.5%	48 37.2%	28 45.2%	33 25.6%	13 21.0%	16 12.4%	12 19.4%	129 100%	62 100%	2.26	2.45
19. Allocating financial resources	4 3.2%	12 18.5%	23 18.3%	16 24.6%	27 21.4%	17 26.2%	72 57.1%	20 30.8%	126 100%	65 100%	3.3	2.69
20. Maintaining support among personnel	5 3.9%	15 24.2%	20 15.6%	26 41.9%	41 32.0%	16 25.8%	62 48.4%	5 8.1%	128 100%	62 100%	3.25	2.18
D. Assisting Clients in Implementation												
21. Planning implementation schedules	7 5.4%	15 22.4%	39 30.2%	22 32.8%	39 30.2%	18 26.9%	44 34.1%	12 17.9%	129 100%	67 100%	2.93	2.40
22. Providing technical assistance or follow-up training	25 19.5%	11 16.4%	40 31.3%	32 47.8%	35 27.3%	14 20.9%	28 21.9%	10 14.9%	128 100%	67 100%	2.52	2.34

*EF = External Facilitator **LF = Local Facilitator

Table 3
External Facilitator and Local Facilitator Assistance
to Local School Sites (Continued)
Data Source: External Agent and Local Site External Agent Site-Specific Interviews

ACTIVITY	Amount of Time Spent on Activity: A lot of time = 1		Moderate amount = 2		A little time = 3		Did not perform this activity = 4		TOTAL		Sample Mean	
	EF*	LF**	EF	LF	EF	LF	EF	LF	EF	LF	EF	LF
D. Assisting Clients in Implementation (cont.)												
23. Assisting teachers in working out procedural details	22 17.1%	18 26.5%	25 19.4%	20 29.4%	27 20.9%	20 29.4%	55 42.6%	10 14.7%	129 100%	68 100%	2.89	2.32
24. "Putting out fires"	8 6.3%	9 13.4%	11 8.7%	24 35.8%	27 21.4%	19 28.4%	80 63.5%	15 22.4%	126 100%	67 100%	3.42	2.60
25. Maintaining support among school personnel	6 4.7%	10 14.9%	19 15.0%	32 47.8%	44 34.6%	16 23.9%	58 45.7%	9 13.4%	127 100%	67 100%	3.21	2.36
E. Follow-Up Activities												
26. Collecting impact data	3 2.0%	11 16.4%	19 12.8%	22 32.8%	47 31.8%	19 28.4%	57 38.5%	15 22.4%	126 100%	67 100%	3.25	2.57
27. Analyzing impact data	6 4.8%	11 16.4%	15 11.9%	19 28.4%	37 29.4%	16 23.9%	68 54.0%	21 31.3%	126 100%	67 100%	3.33	2.70
28. Assisting local site conduct evaluation of new practice	3 2.3%	13 19.7%	22 17.2%	25 37.9%	36 28.1%	15 22.7%	67 52.3%	13 19.7%	128 100%	66 100%	3.31	2.42
29. Developing plan to support continuation of new practice	3 2.3%	16 23.9%	24 18.5%	26 38.8%	39 30.0%	17 25.4%	64 49.2%	8 11.9%	130 100%	67 100%	3.26	2.25
30. Developing additional new users at site	2 1.6%	8 12.1%	18 14.1%	21 31.8%	16 12.5%	11 16.7%	92 71.9%	26 39.4%	128 100%	66 100%	3.55	2.83

*EF = External Facilitator **LF = Local Facilitator

The least performed activity for both groups was making library and computer searches for materials; here again, local facilitators report spending more time on this activity than did external facilitators. Over half the local facilitators (55%) reported spending at least a little time on this activity, whereas only 13% of the external assisters reported spending any time peforming such a task. It begins to appear that scanning the environment for new ideas, practices, etc. may be an important part of the local facilitator role.

Factor Analysis of Assistance Items

We wanted to understand whether these five categories of assistance reflected the way these activities would be organized empirically; so the items in the external facilitator activities list were factor-analyzed for commonalities. The resulting factors correspond quite closely to the five logically-grouped categories, but the assistance sequence is further broken down. In the causal model analyses we used nine factors, seven from the original factor analysis plus two (materials and allocating money) broken out to be parallel with local site data. Table 4 lists the nine factors. Each of the original factors had an Eigenvalue of 1 or greater. We used the nine factors to analyze local facilitator assistance data as well.

Three assistance items were outliers: they did not belong naturally to any one of the factors. The mavericks included "making library and computer searches for materials," "working with site contact," and "fighting fires." The first was the least often performed activity (see Table 3); it and the next two items did not load clearly on any one of the factors.

Table 4
External Facilitator Assistance Factors
Data Source: External Agent Site-Specific Interview

	Factor Loading
Awareness and Initiation:	
arranging or participating in awareness conferences	.67
distributing general information (e.g., flyers, newsletters)	.74
hosting visits to review materials	.15
holding demonstration visits	.27
contacting new clients by mail, telephone, or in-person	.70
Administrator Adoption Preparation:	
seeking commitment from school administrators	.71
seeking support from local school boards	.65
preparing a "case" for the decision to adopt	.55
working with administrators	.24
assesing needs	.14
Support of Teachers:	
seeking commitment from school teachers	.60
building support among school personnel	.72
maintaining support among school personnel (two identical items)	.69 .79
Teacher Adoption Preparation:	
arranging training	.38
training the users	.83
Materials:	
providing detailed information	.66
securing materials or other required resources	.47
Implementation Specifics:	
planning implementation schedules	.55
providing technical assistance or follow-up training	.49
assisting teachers in working out procedural details	.51
Evaluation:	
collecting impact data	.82
analyzing impact data	.94
assisting local site conduct evaluation of new practice	.58
Continuation/Diffusion:	
developing plan to support continuation	.49
developing additional new users at site	.50
Allocating financial resources	.41

On which activity clusters did external and local facilitators spend most time? To answer that question, we computed the mean scores for each factor by site, then totaled the means for each factor for all sites with external facilitators and all the sites with local facilitators. The total means were then adjusted according to the number of items in each factor so they would be comparable. (Within each site, assistance scores of more than one external facilitator or more than one local facilitators were averaged. Thus, for example, NDN SF and D/D data are emerged in this analysis.) Table 5 presents the adjusted sample means for each factor for both external and local facilitators. (Notice that the items were recoded from the original activities list so that 3 = a lot of time; 2 = a moderate amount of time; 1 = a little time; and 0 = did not perform this activity.) Once again, local facilitators spent more time on every aspect of assistance except teacher adoption preparation. External facilitators spent most time on that factor, while local facilitators spent most time on materials. The least performed activity clusters for both were evaluation, continuation/diffusion, and allocating money.

Table 6 breaks down the totals for all external facilitator assistance to sites by program, where interesting differences become apparent. The external facilitators from the NDN non-Title I, NDN Title I, and state-administered programs spent most time on teacher adoption preparation, but Title IV-C locally developed project facilitators spent most of their time on materials.

A few other intriguing points: state-administered program respondents spent considerably more time than any other group on support of teacher activities and somewhat more on continuation/diffusion. NDN Title I facilitators spent the least amount of time of any group on continuation/diffusion and on implementation specifics. Title IV-C consultants performed considerably more evaluation work than any other role group and somewhat more time allocating money; they spent somewhat less time on teacher adoption preparation than the others. The NDN respondents spent the most time of all on teacher adoption preparation.

3. Configurations of External and Local Assistance

Once we had examined separately the assistance given by external facilitators and local facilitators, we began to wonder about the configuration of roles and patterns of assistance. To begin with, we wanted to understand how external facilitators and local facilitators were distributed among the sites. Of the 146 sites, only 17 had identified neither external facilitators nor local facilitators, and 14 of these were BEH. Of the local sites, 53 had both types of assisters present; 62 had only external helpers, and 13 had only internal assisters -- 11 of these were Title IV-C locally developed sites. Table 7 presents these data.

Table 5
Amount of Assistance Provided by External and Local Facilitators
Data Sources: External Agent and Local Site External Agent Site-Specific Interviews
Adjusted Sample Means

	Initiating Awareness	Support of Teachers	Administrator Adoption Preparation	Teacher Adoption Preparation	Materials	Implementation Specifics	Evaluation	Continuation/ Diffusion	Allocating Money	N of Sites
All external facilitators	1.10	.83	.78	1.72	1.61	1.30	.75	.62	.60	97
All local facilitators	--*	1.72	1.58	1.69	1.83	1.58	1.43	1.43	1.31	64

Scale: 0 = did not perform this activity
1 = a little time
2 = a moderate amount of time
3 = a lot of time

*Local facilitators were not asked to respond to items included in Initiating Awareness.

Table 6
External Facilitator Assistance to Local Sites by Program
Data Source: External Facilitator Site-Specific Interviews
Adjusted Sample Means

	Initiating Awareness	Support of Teachers	Administrator Adoption Preparation	Teacher Adoption Preparation	Materials	Implementation Specifics	Evaluation	Continuation/ Diffusion	Allocating Money	N of Sites
NDN non-Title I	.94	.69	.70	1.87	1.68	1.31	.62	.62	.64	44
NDN Title I	1.36	.73	.79	1.52	1.43	.99	.67	.46	.53	24
State-administered programs	1.37	1.40	.93	1.79	1.58	1.51	.86	.74	.62	21
Title IV-C locally developed projects	.46	.38	.84	1.29	1.82	1.56	1.44	.60	.75	8

Scale: 0 = did not perform this activity
1 = a little time
2 = a moderate amount of time
3 = a lot of time

Table 7
Configurations of Identified External and Local Facilitators
by Program*
Data Sources: External Agent and Local Site External Agent Records

	Both external and local facilitators	Only external facilitator	Only local facilitator	Neither		Total
NDN non-Title I	23	25	0	0	=	48
State-administered programs	5	25	0	0	=	30
NDN Title I	16	10	0	0	=	26
Title IV-C locally developed projects	9	1	11	3	=	24
BEH	0	1	2	14	=	17
N of sites =	53	62	13	17	=	145**

*These include all facilitators identified, whether or not interviewed.

**The total number of sites in the study is 146. It proved impossible to verify the presence of facilitators in one state-administered program site.

The table also displays the configurations of assistance by program, and here is where differences begin to appear. NDN non-Title I sites are just about evenly divided between those having both external and local facilitators and those having only external facilitators. NDN Title I sites also are split between the two categories, although the breakdown is more 60/40 than 50/50, with a tilt toward the external/local configuration. The dramatic difference is in state-administered programs, where only 5 sites out of 30 had local facilitators identified! Apparently the external facilitators for these programs largely work alone. Yet another pattern emerges from the Title IV-C locally developed project sites, where half had local facilitators and no external facilitators.

We can get another slant on assistance configurations by examining the differences among external facilitators in their initial approaches to schools; for example, whether some gained entry to the schools through contacts at the individual building level rather than at the district level. We found that nearly half of the external assisters (44%) began working at the building level, while the others (56%) began at the district.

As Table 8 indicates, there appear to be distinct differences by program in the level of initial contact. For example, in 70% of the cases of assistance given by state-administered program developers, the facilitators began working at the building level; whereas in 75% of the cases of assistance given by NDN Title I Developer/Demonstrators, the respondents began at the district level. The NDN non-Title I and Title IV-C facilitators fall in between these two extremes.

Table 8
District/Building Start by External Facilitator Role Group
Data Source: External Agent Site-Specific Interview

	Began with Building	Began with District		Total
NDN Title I	25% (8)	75% (24)	=	100% (32)
NDN non-Title I D/Ds	40% (18)	60% (27)	=	100% (45)
Title IV-C locally developed projects	42% (5)	58% (7)	=	100% (12)
NDN non-Title I (SFs)	50% (8)	50% (8)	=	100% (16)
State-administered programs	70% (16)	30% (7)	=	100% (23)
Total N of cases =	43% (55)	57% (73)	=	100% (128)

When configuration data -- the presence or absence of local facilitators on the site -- is included, additional differences in external assistance patterns become apparent. Table 9 presents external facilitator level of entry data by assistance configuration and program. Of 128 cases of assistance, 54% had local facilitators present, leaving 46% with only external facilitators present. The most common pattern (accounting for 39% of the total) was for external facilitators to begin work at the district level in sites where local facilitators were present.

Nearly two-thirds of NDN Title I external facilitators began work at the district level at sites where there were local facilitators. This may well have meant beginning with the Title I district coordinator, who was often a local facilitator. Title IV-C respondents also tended to begin their assistance at the district level in sites where there was a local facilitator present.

In contrast, state-administered program respondents typically (57% of the cases) began their work at the building level in sites where there was no local facilitator. The picture is more varied for NDN non-Title I external facilitators, as Table 9 indicates. The cases of assistance involving NDN non-Title I Developer/Demonstrators were equally divided between external assistance only and both external and local assistance; the only pattern which seems not to occur very often is that of the D/D initiating assistance at the building level when a local facilitator was present. State Facilitators more often assisted in sites where there was a local facilitator present as well -- in 11 of 16 cases of assistance -- and they started with the district just about as often as they began with the building.

Table 9
External Facilitator Level of Entry by Assistance Configuration and Program

Source of Data: Sample Lists and External Agent Site Specific Interview

	Only External Facilitator Present		Both External and Local Facilitator Present		
	Began with Building	Began with District	Began with Building	Began with District	
NDN Title I	18.6% (6)	12.5% (4)	6.3% (2)	62.5% (10)	= 100% (32)
Title IV-C Locally Developed Projects	8.3% (1)	0.0% (0)	33.3% (4)	58.3% (7)	= 100% (12)
NDN non-Title I (D/Ds)	28.9% (13)	22.2% (10)	11.1% (5)	37.8% (17)	= 100% (45)
NDN non-Title I (SFs)	12.5% (2)	18.8% (3)	37.5% (6)	31.3% (5)	= 100% (16)
State-Administered Programs	56.5% (13)	26.1% (6)	13.0% (3)	4.4% (1)	= 100% (23)
Total N of cases =	27.3% (35)	18.0% (23)	15.6% (20)	39.1% (50)	= 100% (128)

Next, we compared external facilitator assistance given to sites with external and local facilitators present, to sites with only external facilitators identified. Table 10 presents these data, including totals by program.

On the average, external facilitators gave less assistance to those sites where there was a local facilitator present than to those sites where no internal helper was identified: for only three of nine factors (evaluation, continuation/diffusion, and allocating money) were the means higher when local facilitators were present. In the cases of support of teachers and implementation specifics, the means are dramatically lower, suggesting that local facilitators may concentrate on these tasks when they are present. As we shall see in a moment, this may not be true for support of teachers. These patterns hold when the sites are categorized by program, as Table 10 makes clear.

Not incidentally, the data suggest that (with the exception of NDN Title I) external facilitators spent less time on awareness/initiation activities when there was a local facilitator present on a site than when there was not. This may have to do with local facilitators (who are often program coordinators or directors) initiating contact, which they often did.

A glance at Table 11 shows that local facilitators exhibit a different pattern: on average, they spent more time on teacher adoption preparation, materials, and implementation specifics, and continuation/diffusion activities when external facilitators were present than when they worked without outside help. Perhaps an external presence acts as a motivator for a local facilitator attempting change. A caveat about the comparisons made on the basis of Table 11. The only sites for which we had only local facilitators identified were Title IV-C locally developed projects; so in a sense, a strict contrast should be made between Title IV-C sites with only a local facilitator, and those with both local and external. That comparison does not dramatically alter the conclusions drawn from the larger contrast.

4. Variation in Selected Implementation Outcomes by Assistance Configurations

We were unable to perform detailed analyses of the impact of different configurations of external and local assistance on local site outcomes, but three preliminary calculations are suggestive. We used three implementation outcome variables: teacher change in practice, practice-specific mastery, and fidelity. For each, we averaged the scores of teachers by site, then computed the means for each assistance configuration (both external and local facilitators present, only external, etc.) by program.

Table 10
Comparison of Amounts of External Assistance Given to Sites Having Only External Facilitators with Sites Having Both External and Local Facilitators Present
Data Source: External Agent Site-Specific Interview
Adjusted Sample Means

	Initiating Awareness	Support of Teachers	Administrator Adoption Preparation	Teacher Adoption Preparation	Materials	Implementation Specifics	Evaluation	Continuation/ Diffusion	Allocating Money	N of Sites
All sites with external facilitators	1.10	.83	.78	1.72	1.61	1.30	.75	.62	.60	97*
Sites with external facilitator only	1.19	1.02	.80	1.76	1.67	1.46	.73	.58	.58	49
Sites with both external and local facilitators	1.01	.66	.79	1.68	1.54	1.14	.81	.61	.64	46
NDN non-Title I sites with external only	.95	.84	.68	1.83	1.69	1.43	.69	.58	.54	23
NDN non-Title I sites with both external/ local	.91	.56	.75	1.89	1.65	1.17	.57	.63	.73	20
NDN Title I sites with external only	1.36	.85	.81	1.33	1.32	1.13	.63	.38	.50	8
NDN: Title I sites with both external/ local	1.41	.70	.80	1.67	1.50	.96	.74	.47	.53	15

Table 10
Comparison of Amounts of External Assistance Given to Sites Having Only External Facilitators with Sites Having Both External and Local Facilitators Present (Continued)
Data Source: External Agent Site-Specific Interview
Adjusted Sample Means

	Initiating Awareness	Support of Teachers	Administrator Adoption Preparation	Teacher Adoption Preparation	Materials	Implementation Specifics	Evaluation	Continuation/ Diffusion	Allocating Money	N of Sites
State-administered program sites with external only	1.43	1.40	.92	1.84	1.72	1.59	.88	.68	.53	17
State-administered with both external/local	1.10	1.38	.95	1.58	1.00	1.17	.75	1.00	1.0	4
Title IV-C locally developed project sites with only external	1.00	0	1.20	2.33	3.00	2.33	0	.50	3.00	1
Title IV-C locally developed project sites with both external/ local	.39	.43	.79	1.14	1.64	1.45	1.64	.61	.43	7

*2 sites with external facilitators are included here, but not in the other calculations.

Scale: 0 = did not perform this activity
1 = a little time
2 = a moderate amount of time
3 = a lot of time

Table 11
Comparison of Amounts of Local Assistance Given to Sites Having Only External Facilitators with Sites Having Both Local and External Facilitators
Data Source: Local Facilitator Site-Specific Interview
Adjusted Sample Means

	Initiating Awareness*	Support of Teachers	Administrator Adoption Preparation	Teacher Adoption Preparation	Materials	Implementation Specifics	Evaluation	Continuation/ Diffusion	Allocating Money	N of Sites
Sites with local facilitators only (Title IV-C sites)	--	2.07	1.65	1.38	1.64	1.29	1.44	1.34	1.29	10
Sites with both local and external facilitators	--	1.70	1.58	1.76	1.87	1.69	1.41	1.45	1.28	46
Sites w/both external/local facilitators										
NDN: non-Title I	--	1.63	1.56	1.49	1.61	1.49	.91	1.37	1.05	20
NDN: Title I	--	1.75	1.69	2.10	2.15	1.84	1.76	1.47	1.35	15
State-administered programs	--	1.75	1.15	2.00	1.75	2.00	2.00	1.88	1.50	4
Title IV-C locally developed projects	--	1.75	1.66	1.67	2.07	1.81	1.43	1.43	1.71	7

*Local facilitators were not asked to respond to items included in Initiating Awareness.

Scale: 0 = did not perform this activity
1 = a little time
2 = a moderate amount of time
3 = a lot of time

Table 12
Teacher Change in Practice (by site) by External/Local Facilitator Assistance
Data Sources: User Interview, External Agent and Local Site External Agent Records

	Both external and local facilitators Mean/N	Only external facilitator Mean/N	Only local facilitator Mean/N	Neither Mean/N	=	Totals Mean/N
BEH	--	1.00 (1)	0 (2)	.94 (8)	=	.78 (11)
NDN (total)	1.35 (37)	.91 (34)	--	--	=	1.15 (71)
Non-Title I	.90 (22)	.43 (25)	--	--	=	.65 (47)
Title I	1.80 (15)	1.38 (9)	--	--	=	1.64 (24)
State-administered programs	1.50 (3)	1.57 (23)	--	--	=	1.56 (26)
Title IV-C locally developed projects	1.74 (8)	1.68 (1)	1.97 (10)	1.27 (3)	=	1.78 (22)
Totals	1.36 (48)	1.05 (59)	1.64 (12)	1.03 (11)	=	1.22 (130)

Scale: -3 = low change in practice
+3 = high change in practice

Table 13
Practice-specific Mastery (by site) by External/Local Facilitator Assistance Configuration and Program
Data Sources: User Interview, External Agent and Local Site External Agent Records

	Both external and local facilitators Mean/N	Only external facilitator Mean/N	Only local facilitator Mean/N	Neither Mean/N	=	Totals Mean/N
BEH	--	0.00 (1)	1.50 (2)	2.38 (8)	=	2.00 (11)
NDN (total)	2.65 (39)	2.42 (34)	--	--	=	2.54 (73)
Non-Title I	2.48 (23)	2.29 (25)	--	--	=	2.38 (48)
Title I	2.89 (16)	2.79 (9)	--	--	=	2.85 (25)
State-administered programs	4.30 (5)	2.42 (23)	--	--	=	2.76 (28)
Title IV-C locally developed projects	3.72 (9)	5.00 (1)	3.94 (10)	2.67 (3)	=	3.73 (23)
Totals	2.99 (53)	2.43 (59)	3.53 (12)	2.46 (11)	=	2.75 (135)

Scale: 0 (low mastery) to 7 (high mastery)

Table 14
Fidelity (by site) by External/Local Facilitator
Assistance Configuration and Program
Data Sources: User Interview, External Agent and Local Site External Agent Records

	Both external and local facilitators Mean/N	Only external facilitator Mean/N	Only local facilitator Mean/N	Neither Mean/N	=	Totals Mean/N
BEH	--	.333(1)	.584(2)	.713(8)	=	.655(11)
NDN (total)	.809(39)	.754(34)	--	--	=	.783(73)
Non-Title I	.778(23)	.740(25)	--	--	=	.758(48)
Title I	.853(16)	.795(9)	--	--	=	.832(25)
State-administered programs	.950(3)	.705(23)	--	--	=	.763(26)
Title IV-C locally developed projects	.771(9)	.788(1)	.807(10)	.829(3)	=	.795(23)
Totals	.810(53)	.729(59)	.770(12)	.745(11)	=	.771(133)

Scale: 0 to 1

Table 12 displays the results for teacher change in practice. The scale for this variable ranges from -3 (low change) to +3 (high change). Title IV-C locally developed projects had the highest overall mean and BEH the lowest. But what is most striking is that the mean score for NDN non-Title I sites with both external and local facilitators present is more than twice as high as that of sites with only an external facilitator present; for NDN Title I sites, the increase is dramatic, but not twice as high. In all cases where we have data, the scores for sites with an external/local pair are higher than those with only an external facilitator -- with one exception: the sites of state-administered program developers, who, as we have seen tend to work alone and to begin at the building level, have slightly higher scores in the external facilitator only category.

The mean score for BEH sites with neither external nor local facilitators present suggests that sites that do attempt to use BEH products do well without assistance. This finding is balanced by our discovery that few BEH sites ever got to the point of trying the new practices in the first place.

In looking at these figures, remember that the size of the teacher change in practice score is proportionate to the amount of required change: Title IV-C, local development state-administered program, and NDN Title I practices tended to require more change than many NDN non-Title I innovations.

The variation in the total means for practice-specific mastery (see Table 13) is not as dramatic but the same tend is apparent: the scores of sites with both external and local facilitators present are higher than the score of sites where only external facilitators are present, with the exception of Title IV-C locally developed projects. For this variable, the scale ranges from 0 to 7.

Table 14 presents the means for sites by assistance configuration and program for the variable fidelity, which has a scale from 0 to 1. Again the same pattern holds whereby sites with both external and local facilitators present have higher scores than sites with only external facilitators; again, Title IV-C locally developed projects are an exception.

It should be noted that for all these variables, Title IV-C sites with only local facilitators present had high means overall, in all cases higher than the sites with both external and locals present. While all these calculations can only be suggestive, it seems reasonable to posit that local facilitator assistance in a site is a critical component of successful school improvement efforts.

5. Implications

In looking back at the data we have reported for external and local facilitators, their sheer presence in local sites attempting change is striking: of 146 local schools in the study sample, only 17 did not nominate either an external or a local facilitator, and 14 of those sites were BEH program settings.

Assistance given by external and local facilitators formed nine clusters of activity: initiation/awareness; support of teachers administrator adoption preparation; teacher adoption preparation; materials; implementation specifics; evaluation; continuation/diffusion and allocating financial resources. The external and local facilitators performed many of the same assistance tasks, but it appears that the local facilitators spent more time on nearly every aspect of a change effort except providing detailed information and working with the site contact (who usually was the local facilitator). In fact, external facilitators appear to have spent less time on most activity clusters when they worked with sites where there was a local facilitator as well. Yet for the NDN sites we studied, the scores for the three outcome variables we looked at were much higher for sites having both external and local assistance than for sites having only external facilitator help. State-administered program developers, on the other hand, tended to work alone, and yet had high scores on the outcome variables. But they seem to have entered at the building level and perhaps therefore bypassed the complementary district role. Title IV-C locally developed sites had yet another pattern: although there were several sites with both external and local facilitators, most of these sites had local facilitators only. They, too, had high scores on the outcome variables. Clearly there are several configurations of assistance possible.

Our external and local facilitator respondents were examples of highly educated, experienced and professionally active educators. Many of the external facilitators had been administrators or teachers in their previous jobs, and most had performed at least one facilitator function, such as developing curriculum, training teachers, and disseminating information in their prior positions. It is therefore tempting to speculate that they could have been identified as local facilitators in their previous roles. In fact, the data suggest that the external facilitator role is an attractive one for educators seeking a move -- a new challenge -- after some years of school-based experience. As external facilitators frequently noted in describing job satisfaction, "It's a chance to make a contribution to education." Without the federal and state programs that sponsor such roles, many talented practitioners might be lost to the field of education altogether. Moreover, as school districts trim central office personnel to reduce budgets, the local facilitator role is in danger of being cut back as well. Yet, the complementary contributions of these two groups of assistance providers may make the difference between going through the motions of change and real shifts in individual and organizational practice in local schools.

NOTES

1. The study and its findings are described in detail in a master report series entitled, People, policies, and practices: examining the chain of school improvement, Volumes I-X, David P. Crandall and Associates, The NETWORK, Inc., 1982.

2. For a complete discussion of external and local facilitators, see Volume II of the master report series, Portrait of the changes, the players, and the contexts, Susan F. Loucks, Pat L. Cox, Matthew B. Miles, and A. Michael Huberman, The NETWORK, Inc., 1982.

3. The analyses of causal models are described in Volume III of the master report series, Models of change, Joyce Ellyn Bauchner, Jeffrey W. Eiseman, Pat L. Cox, and William B. Schmidt, The NETWORK, Inc., 1982.

4. The programs studied as part of the DESSI project are described in Volume I of the master report series, Setting the stage for a study of school improvement, Susan F. Loucks, Joyce Ellyn Bauchner, David P. Crandall, William B. Schmidt, and Jeffrey W. Eiseman, The NETWORK, Inc., 1982.